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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,225	01/16/2004	Wolfgang Albrecht	NI 160	2196

7590 06/12/2008
KLAUS J. BACH & ASSOCIATES
PATENTS AND TRADEMARKS
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MURRYSVILLE, PA 15668

EXAMINER

HEITBRINK, JILL LYNNE

ART UNIT	PAPER NUMBER
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1791

MAIL DATE	DELIVERY MODE
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06/12/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/762,225

Applicant(s)

ALBRECHT ET AL.

Examiner

Jill L. Heitbrink

Art Unit

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/02)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 29, 2008 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 1 has been amended to include the terms "ANNVP 20" and "ANNVP 5" which are unclear as to the meaning as an abbreviation. Additionally, if these terms are trademarks they should not be used in the claims.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koros (US 5599380) taken together with Maeda et al..

7. As to claim 1, Koros (US 5599380) teaches a method of producing a polymeric membrane including: dissolving a first polymer(s) (preparing a first polymer) in a suitable solvent to form a core (blood compatible) solution (homogeneous solution) (col. 2, lines 56-61); dissolving a second polymer(s) (preparing a second polymer) in a suitable solvent to form a sheath (tissue compatible) solution (homogeneous solution) (col. 2, lines 62-63); coextruding the core (blood compatible) and sheath (tissue compatible) through a spinneret (contacting solutions) orifice (nozzle) to provide a multicomponent fiber membrane (layered polymer) (col. 2, lines 64-67); introducing the multicomponent fiber membrane into a coagulation bath to solidify the fiber (subject to phase inversion) (col. 3, lines 3-6); and extracting the solvent (non-membrane components freed) (col. 7, lines 1-4). Maeda et al. teaches the extrusion of a polyacrylonitrile copolymer two layer membrane. It would have been obvious to a person of ordinary skill in the art to extrude the polyacrylonitrile material of Maeda in a similar process to Koros since both are forming membranes by an extruder with a coagulation bath. As to claim 2, Koros (US 5599380) teaches an additional step in the process described above including drawing the multicomponent fiber membrane (layered polymer) through an air gap (col. 3, lines 1-2). As to claim 3, Koros (US 5599380) teaches multicomponent hollow fiber membrane extruded through a spinneret (spin extrusion nozzle) (col. 3, lines 5-6 and col. 2, lines 64-67). As to claim 4, Koros (US 5599380) teaches extruding the polymer solutions through a multiple channel spinneret

Art Unit: 1791

while maintaining a gas pressure in the hollow fiber (core) (col. 5, lines 49-54). As to claim 5, Koros (US 5599380) discloses a bore fluid (lumen filler) to facilitate generation of the hollow fiber (col. 6, lines 33-44). As to claim 6, Koros (US 5599380) teaches using a polyurethane outer layer (tissue compatible polymer) (col. 3, line 48) and a polyamide inner layer (blood compatible polymer) (col. 3, line 58). As to claim 7, Koros (US 5599380) teaches that a common solvent dimethyl formamide (DMF) can be used (col. 8, lines 5-13). As each and every element of the claimed invention is taught in the prior art as recited above, the claims are anticipated by Koros (US 5599380).

8. As to claim 8, Koros (US 5599380) does not expressly teach a specific additional polymer being common to both first and second polymers, however, Koros (US 5599380) states that the polymers used for the gas separation layer (tissue compatible layer) can be blended, substituted, or copolymers (col. 3, lines 47-50) and that the substrate layer (blood compatible layer) can be blended, copolymerized and substituted (col. 4, lines 1-2) suggesting that the two polymer layers can each be blended with an additional common polymer, such as polyamid, which is common to both layers as a choice for use (col. 3, line 31 and col. 3, line 59). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to blend a common polymer with the gas separation layer (tissue compatible layer) and substrate layer (blood compatible layer), as taught by Koros (US 5599380), because the additional common polymer may increase layer compatibility. As to claims 9 and 11, Koros (US 5599380) does not expressly teach a mass content of blood-compatible and tissue compatible polymers and the additional polymer in the total polymer content. However,

it is submitted that an optimum polymer mass content is desirable and can be optimized through routine experimentation (MPEP 2144.05 II A). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the polymer mass content percent through routine experimentation. As to claim 10, Koros (US 5599380) does not expressly teach a concentration of the first and second polymer solutions. However, it is submitted that an optimum polymer solution concentration is desirable and can be optimized through routine experimentation (MPEP 2144.05 II A). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the polymer solution concentrations and can be optimized through routine experimentation.

Response to Arguments

9. Applicant's arguments filed April 29, 2008 have been fully considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill L. Heitbrink whose telephone number is (571) 272-1199. The examiner can normally be reached on Monday-Friday 9 am -2 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1791

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jill L. Heitbrink/
Primary Examiner, Art Unit 1791